查询PL100Z供应商

T-11-15

THOMSON-CSF
DIVISION SEMICONDUCTEURS

59C 02497 D

# PL 3V3Z → PL 200Z

## ZENER DIODES
## *DIODES ZENER*

1,3 W silicon Zener diodes, hermetically sealed plastic according to normalization CCTU : F 126 offering the following advantages :

- Large voltage range : 3,3 V to 200 V
- High surge capability : 30 W @ 10 ms

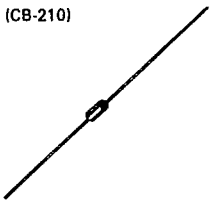
*Diodes Zener de 1,3 W au silicium encapsulées plastique selon normalisation CCTU : F 126 offrant les avantages suivants :*

- *Gamme de tension étendue : 3,3 V à 200 V*
- *Forte tenue en surcharge : 30 W @ 10 ms*

$P_{tot}$ = 1,3 W

3,3 V ⩽ $V_{ZT}$ nom ⩽ 200 V

Case *Boîtier* : F-126 (CB-210)



**ABSOLUTE RATINGS (LIMITING VALUES)** *VALEURS LIMITES ABSOLUES D'UTILISATION* $T_{amb}$ = 50°C d = 10 mm (Unless otherwise stated) *(Sauf indications contraires)*

| | | | |
|---|---|---|---|
| DC power dissipation (see fig. 1) *Dissipation de puissance en régime permanent (voir fig. 1)* | $P_{tot}$ | 1,3 | W |
| Continuous reverse current *Courant inverse continu* | $I_{ZM}$ | See page 2 *Voir page 2* | mA |
| Non repetitive surge peak power dissipation (t = 10 ms) (see fig. 4) *Puissance de surcharge crête accidentelle (t = 10 ms) (voir fig. 4)* $T_j$ initial = 25°C | $P_{RSM}$ | 30 | W |
| Operating temperature *Température de fonctionnement* | $T_{oper}$ | − 55 → + 150 | °C |
| Storage temperature *Température de stockage* | $T_{stg}$ | − 55 → + 150 | °C |
| Maximum junction temperature *Température maximale de jonction* max | $T_j$ | 150 | °C |
| Maximum lead temperature for soldering during 3 s at 5 mm from case *Température maximum de soudure des connexions pendant 3 s à 5 mm du boîtier* | $T_L$ | 300 | °C |

| | | | | |
|---|---|---|---|---|
| Junction-ambient thermal resistance *Résistance thermique jonction-ambiante* | max | $R_{th(j-a)}$ | 75 | °C/W |

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THOMSON COMPOSANTS

## ELECTRICAL CHARACTERISTIC
## *CARACTERISTIQUES ELECTRIQUES*

$T_{amb}$ = 25°C

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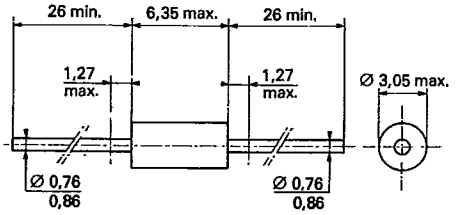
| Types | $V_{ZT}$ / $I_{ZT}$ min (V) | max (V) | $r_{ZT}$/$I_{ZT}$ max (Ω) | $I_{ZT}$ (mA) | $\alpha_{VZ}$ typ ($10^{-4}$/°C) | $I_R$/$V_R$ max (μA) | $V_R$ (V) | $I_{ZM}$ (mA) |
|---|---|---|---|---|---|---|---|---|
| PL 3V3 Z | 3,1 | 3,5 | 10 | 100 | - 6 | | | 320 |
| PL 3V6 Z | 3,4 | 3,8 | 10 | 100 | - 5,5 | | | 290 |
| PL 3V9 Z | 3,7 | 4,1 | 10 | 100 | - 5 | | | 280 |
| PL 4V3 Z | 4,0 | 4,6 | 7 | 100 | - 4 | | | 250 |
| PL 4V7 Z | 4,4 | 5,0 | 7 | 100 | - 2 | | | 215 |
| PL 5V1 Z | 4,8 | 5,4 | 5 | 100 | 1 | | | 200 |
| PL 5V6 Z | 5,2 | 6,0 | 2 | 100 | 2,5 | | | 190 |
| PL 6V2 Z | 5,8 | 6,6 | 2 | 100 | 3,2 | | | 170 |
| PL 6V8 Z | 6,4 | 7,2 | 2 | 100 | 4 | | | 155 |
| PL 7V5 Z | 7,0 | 7,9 | 2 | 100 | 4,5 | 1 | 2 | 140 |
| PL 8V2 Z | 7,7 | 8,7 | 2 | 100 | 4,8 | 1 | 3,5 | 130 |
| PL 9V1 Z | 8,5 | 9,6 | 4 | 50 | 5,1 | 1 | 3,5 | 120 |
| PL 10 Z | 9,4 | 10,6 | 4 | 50 | 5,5 | 1 | 5 | 105 |
| PL 11 Z | 10,4 | 11,6 | 7 | 50 | 6 | 1 | 5 | 97 |
| PL 12 Z | 11,4 | 12,7 | 7 | 50 | 6,5 | 1 | 7 | 88 |
| PL 13 Z | 12,4 | 14,1 | 10 | 50 | 6,5 | 1 | 7 | 79 |
| PL 15 Z | 13,8 | 15,6 | 10 | 50 | 7 | 1 | 10 | 71 |
| PL 16 Z | 15,3 | 17,1 | 15 | 25 | 7 | 1 | 10 | 66 |
| PL 18 Z | 16,8 | 19,1 | 15 | 25 | 7,5 | 1 | 10 | 62 |
| PL 20 Z | 18,8 | 21,2 | 15 | 25 | 7,5 | 1 | 10 | 56 |
| PL 22 Z | 20,8 | 23,3 | 15 | 25 | 8 | 1 | 12 | 52 |
| PL 24 Z | 22,8 | 25,6 | 15 | 25 | 8 | 1 | 12 | 47 |
| PL 27 Z | 25,1 | 28,9 | 15 | 25 | 8,5 | 1 | 14 | 41 |
| PL 30 Z | 28 | 32 | 15 | 25 | 8,5 | 1 | 14 | 36 |
| PL 33 Z | 31 | 35 | 15 | 25 | 8,5 | 1 | 17 | 33 |
| PL 36 Z | 34 | 38 | 40 | 10 | 8,5 | 1 | 17 | 30 |
| PL 39 Z | 37 | 41 | 40 | 10 | 9 | 1 | 20 | 28 |
| PL 43 Z | 40 | 46 | 45 | 10 | 9 | 1 | 20 | 26 |
| PL 47 Z | 44 | 50 | 45 | 10 | 9 | 1 | 24 | 23 |
| PL 51 Z | 48 | 54 | 60 | 10 | 9 | 1 | 24 | 21 |
| PL 56 Z | 52 | 60 | 60 | 10 | 9 | 1 | 28 | 19 |
| PL 62 Z | 58 | 66 | 80 | 10 | 9 | 1 | 28 | 16 |
| PL 68 Z | 64 | 72 | 80 | 10 | 9 | 1 | 34 | 15 |
| PL 75 Z | 70 | 79 | 100 | 10 | 9 | 1 | 34 | 14 |
| PL 82 Z | 77 | 87 | 100 | 10 | 9 | 1 | 41 | 12 |
| PL 91 Z | 85 | 96 | 200 | 5 | 9 | 1 | 41 | 12 |
| PL 100 Z | 94 | 106 | 200 | 5 | 9 | 1 | 50 | 11 |
| PL 110 Z | 104 | 116 | 250 | 5 | 9,5 | 1 | 50 | 10 |
| PL 120 Z | 114 | 127 | 250 | 5 | 9,5 | 1 | 60 | 9 |
| PL 130 Z | 124 | 141 | 300 | 5 | 9,5 | 1 | 60 | 8 |
| PL 150 Z | 138 | 156 | 300 | 5 | 9,5 | 1 | 75 | 7 |
| PL 160 Z | 153 | 171 | 350 | 5 | 9,5 | 1 | 75 | 7 |
| PL 180 Z | 168 | 191 | 350 | 5 | 9,5 | 1 | 90 | 6 |
| PL 200 Z | 188 | 212 | 350 | 5 | 10 | 1 | 90 | 5 |

Forward voltage drop : $V_F \leq 1,5\ V$ @ $I_F = 200\ mA$, $T_{amb} = 25°C$
*Chute de tension directe*

## CASE DESCRIPTION
## *DESCRIPTION DU BOITIER*




Weight : 0,4 g
*Masse*

Marking clear, ring at cathode end
*Marquage en clair, anneau coté cathode*

F-126 (CB-210)

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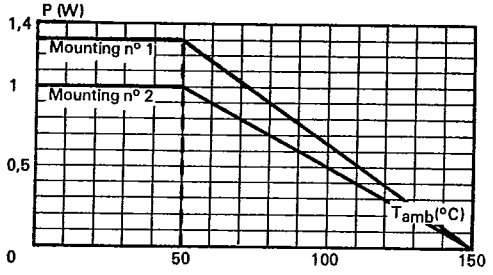



**Fig. 1** - Maximum allowable power dissipation versus ambient temperature.

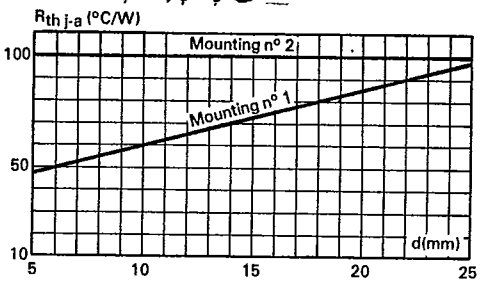
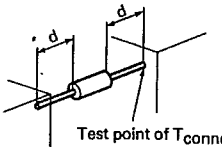
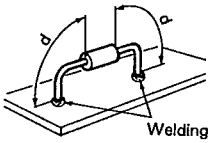



**Fig. 2** - Thermal resistance junction-ambient versus lead length (typical values).

Mounting n° 1 :
INFINITE HEATSINK




Mounting n° 2 :
PRINTED CIRCUIT



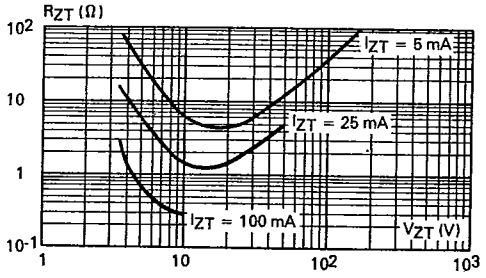




**Fig. 3** - Differential resistance $R_{ZT}$ versus $V_{ZT}$ for different currents $I_{ZT}$ (typical values).

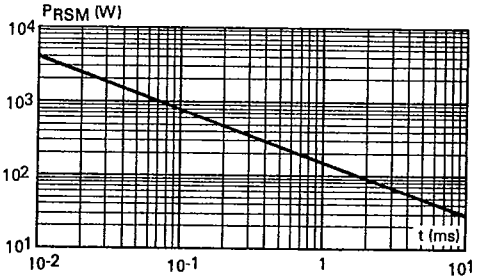



**Fig. 4** - Non repetitive surge peak reverse power dissipation $P_{RSM}$ versus pulse duration at $T_j$ initial = 25°C (maximum values).

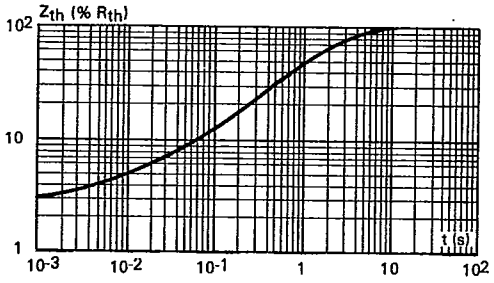



**Fig. 5** - Transient thermal impedance junction-connexions $Z_{th\ (j-a)}$ versus pulse duration for mounting n° 1 with d = 10 mm (typical values).

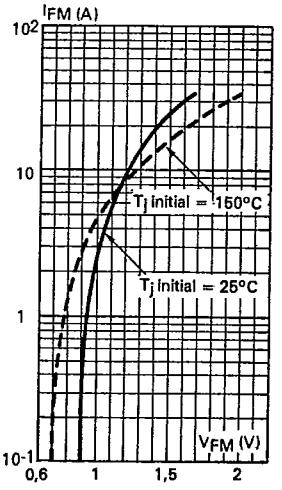



**Fig.6** - Peak forward current $I_{FM}$ versus peak forward voltage drop $V_{FM}$ (typical values).

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